

Amendments to the Claims:

1. (currently amended) A method for controlling a production operation, comprising:  
electronically reading printed information from at least one component tape at intervals along  
the at least one component tape, wherein the printed information includes a count of at least  
one electronic component, the count indicating a position of the at least one electronic on the  
component tape; and  
automatically controlling at least one production device using the printed information by,  
verifying components of at least one production position by accessing a component  
database,  
verifying equivalent components of the at least one production position from an  
alternative component database, and  
verifying that at least one rule is satisfied using a rule database.
2. (currently amended) The method of claim 1, wherein automatically controlling at least one  
production device ~~comprises~~ includes:  
~~verifying components of at least one production position using the printed information;~~  
verifying a production set-up using the printed information; and  
inhibiting production upon detection of an incorrect production set-up[ ; ].
3. (canceled)
4. (original) The method of claim 2, further comprising verifying that at least one rule is  
satisfied using the printed information.
5. (original) The method of claim 1, further comprising:  
providing at least one advance notice of when material will be exhausted for the at least  
one production position;  
tracking an inventory of the at least one electronic component using the printed  
information;  
controlling the inventory using the printed information; and  
generating production records using the printed information.

6. (original) The method of claim 1, further comprising transferring the electronically read printed information using a Radio Frequency Data Communications (RFDC) system.
7. (original) The method of claim 1, further comprising:
  - electronically reading printed feeder information off of at least one feeder;
  - electronically identifying the at least one feeder; and
  - determining that the at least one feeder is fit for operation using information of at least one feeder database.
8. (original) The method of claim 1, wherein the printed information further comprises at least one item selected from a group comprising part number, tolerance and value description, batch number, lot number, component manufacturer, and component vendor, and wherein the printing comprises at least one type selected from a group comprising alphanumeric characters and Automatic Identification and Data Capture (AIDC) technologies, and wherein the printing is produced using at least one method selected from a group comprising printing, ink jet printing, laser etching, and imaging.
9. (original) The method of claim 1, wherein the AIDC technologies comprise one-dimensional barcodes, two-dimensional barcodes, three-dimensional barcodes, composite symbology, and Reduced Space Symbology barcodes.
10. (original) The method of claim 1, wherein the electronic reading comprises scanning and reading using at least one technology selected from a group comprising Optical Character Recognition (OCR), Optical Mark Recognition (OMR), Magnetic Ink Character Recognition (MICR), infrared scanning, and machine vision, wherein the machine vision technology uses at least one vision subsystem selected from a group comprising linear imagers, laser imagers, and charge coupled device (CCD) cameras.
11. (original) The method of claim 1, wherein electronically reading printed information comprises scanning and reading printed information on at least one cover tape of the at least one component tape.

12. (original) The method of claim 1, wherein electronically reading printed information comprises scanning and reading printed information on at least one carrier tape of the at least one component tape.

13. (currently amended) A system for controlling a production operation, the system comprising at least one processor coupled to at least one memory device and at least one production device, the system capable of monitoring and controlling the production operation by:

electronically reading printed information from at least one component tape at intervals along the at least one component tape, wherein the printed information includes a count of at least one electronic component, the count indicating a position of the at least one electronic component on the component tape; and

automatically controlling at least one production device using the printed information by,  
verifying components of at least one production position by accessing a component database,

verifying equivalent components of the at least one production position from an alternative component database, and

verifying that at least one rule is satisfied using a rule database.

14. (original) The system of claim 13, wherein the system is further capable of monitoring and controlling the production operation by transferring the electronically read printed information using a Radio Frequency Data Communications (RFDC) system.

15. (currently amended) The system of claim 13, ~~further comprising at least one component database;~~ wherein automatically controlling at least one production device ~~comprises~~ includes:

~~verifying components of at least one production position using the printed information and information from the at least one component database;~~

verifying a production set-up using the printed information; and

inhibiting production upon detection of an incorrect production set-up.

16.- 17. (canceled).

18. (original) The system of claim 15, further comprising at least one feeder database, wherein automatically controlling includes electronically identifying at least one feeder and determining that the at least one feeder is fit for operation using the at least one feeder database.

19. (original) The system of claim 13, wherein the system is further capable of monitoring and controlling the production operation by:

providing at least one advance notice of when material will be exhausted for the at least one production position;

tracking an inventory of the at least one electronic component using the printed information;

controlling the inventory using the printed information; and

generating production records using the printed information.

20. (original) The system of claim 13, wherein the printed information further comprises at least one item selected from a group comprising part number, tolerance and value description, batch number, lot number, component manufacturer, and component vendor, and wherein the printing comprises at least one type selected from a group comprising alphanumeric characters and Automatic Identification and Data Capture (AIDC) technologies, and wherein the printing is produced using at least one method selected from a group comprising printing, ink jet printing, laser etching, and imaging.

21. (original) The system of claim 13, wherein the AIDC technologies comprise one-dimensional barcodes, two-dimensional barcodes, three-dimensional barcodes, composite symbology, and Reduced Space Symbology barcodes, wherein the electronic reading comprises scanning and reading using at least one technology selected from a group comprising Optical Character Recognition (OCR), Optical Mark Recognition (OMR), Magnetic Ink Character Recognition (MICR), infrared scanning, and machine vision, wherein the machine vision technology uses at least one vision subsystem selected from a group comprising linear imagers, laser imagers, and charge coupled device (CCD) cameras.

22. (original) The system of claim 13, wherein electronically reading printed information comprises scanning and reading printed information on at least one cover tape of the at least one component tape.

23. (original) The system of claim 13, wherein electronically reading printed information comprises scanning and reading printed information on at least one carrier tape of the at least one component tape.

24. (currently amended) A computer readable medium containing executable instructions which, when executed in a processing system, causes the system to control a production operation, the controlling comprising:

electronically reading printed information from at least one component tape at intervals along the at least one component tape, wherein the printed information includes a count of at least one electronic component, the count indicating a position of the at least one electronic component on the component tape; and

automatically controlling at least one production device using the printed information by verifying components of at least one production position by accessing a component database,

verifying equivalent components of the at least one production position from an alternative component database, and

verifying that at least one rule is satisfied using a rule database.

25. (currently amended) The computer readable medium of claim 24, wherein the automatically controlling further comprising includes:

~~verifying components of at least one production position using the printed information;~~

~~verifying equivalent components of the at least one production position using the printed information;~~

~~verifying that at least one rule is satisfied using the printed information;~~

verifying a production set-up using the printed information; and

inhibiting production upon detection of an incorrect production set-up[ ; ].

26. (original) The computer readable medium of claim 24, wherein the controlling further comprises:

providing at least one advance notice of when material will be exhausted for the at least one production position;

tracking an inventory of the at least one electronic component using the printed information;

controlling the inventory using the printed information; and  
generating production records using the printed information.

27. (original) The computer readable medium of claim 24, wherein the printed information further comprises at least one item selected from a group comprising part number, tolerance and value description, batch number, lot number, component manufacturer, and component vendor, and wherein the printing comprises at least one type selected from a group comprising alphanumeric characters and Automatic Identification and Data Capture (AIDC) technologies, and wherein the printing is produced using at least one method selected from a group comprising printing, ink jet printing, laser etching, and imaging.

28. (original) The computer readable medium of claim 24, wherein the AIDC technologies comprise one-dimensional barcodes, two-dimensional barcodes, three-dimensional barcodes, composite symbology, and Reduced Space Symbology barcodes, wherein the electronic reading comprises scanning and reading using at least one technology selected from a group comprising Optical Character Recognition (OCR), Optical Mark Recognition (OMR), Magnetic Ink Character Recognition (MICR), infrared scanning, and machine vision, wherein the machine vision technology uses at least one vision subsystem selected from a group comprising linear imagers, laser imagers, and charge coupled device (CCD) cameras.

29. (original) The computer readable medium of claim 24, wherein electronically reading printed information comprises scanning and reading printed information on at least one cover tape of the at least one component tape.

30. (original) The computer readable medium of claim 24, wherein electronically reading printed information comprises scanning and reading printed information on at least one carrier tape of the at least one component tape.

31. (currently amended) An electromagnetic medium containing executable instruction which, when executed in a processing system, causes the system to control a production operation, the controlling comprising:

electronically reading printed information from at least one component tape at intervals along the at least one component tape, wherein the printed information includes a count of at least one electronic component, the count indicating a position of the at least one electronic component on the component tape; and

automatically controlling at least one production device using the printed information by, verifying components of at least one production position by accessing a component database,

verifying equivalent components of the at least one production position from an alternative component database, and

verifying that at least one rule is satisfied using a rule database.

32. (currently amended) The computer readable medium of claim 31, wherein the automatically controlling further comprising includes:

~~verifying components of at least one production position using the printed information;~~

~~verifying equivalent components of the at least one production position using the printed information;~~

~~verifying that at least one rule is satisfied using the printed information;~~

verifying a production set-up using the printed information; and

inhibiting production upon detection of an incorrect production set-up [ ; ].

33. (original) The electromagnetic medium of claim 31, wherein the controlling further comprises:

providing at least one advance notice of when material will be exhausted for the at least one production position;

tracking an inventory of the at least one electronic component using the printed information;

controlling the inventory using the printed information; and

generating production records using the printed information.

34. (original) The electromagnetic medium of claim 31, wherein the printed information further comprises at least one item selected from a group comprising part number, tolerance and value description, batch number, lot number, component manufacturer, and component vendor, and wherein the printing comprises at least one type selected from a group comprising alphanumeric

characters and Automatic Identification and Data Capture (AIDC) technologies, and wherein the printing is produced using at least one method selected from a group comprising printing, ink jet printing, laser etching, and imaging.

35. (original) The electromagnetic medium of claim 31, wherein the AIDC technologies comprise one-dimensional barcodes, two-dimensional barcodes, three-dimensional barcodes, composite symbology, and Reduced Space Symbology barcodes, wherein the electronic reading comprises scanning and reading using at least one technology selected from a group comprising Optical Character Recognition (OCR), Optical Mark Recognition (OMR), Magnetic Ink Character Recognition (MICR), infrared scanning, and machine vision, wherein the machine vision technology uses at least one vision subsystem selected from a group comprising linear imagers, laser imagers, and charge coupled device (CCD) cameras.

36. (original) The electromagnetic medium of claim 31, wherein electronically reading printed information comprises scanning and reading printed information on at least one cover tape of the at least one component tape.

37. (original) The electromagnetic medium of claim 31, wherein electronically reading printed information comprises scanning and reading printed information on at least one carrier tape of the at least one component tape.